

SYSTEM **P**LANNING & **A**NALYSIS **R**eport

S-I

T.H. 212, 95

T.H. 694 TO ST. CROIX RIVER AND
T.H. 95 BY-PASS

S.P. 8214-47, 8210

FEBRUARY, 1970

PREPARED BY
OFFICE OF SYSTEM PLANNING



**MINNESOTA
DEPARTMENT
OF HIGHWAYS**

Office Memorandum

DEPARTMENT HIGHWAY

TO : Paul G. Velz
Road Design Engineer

DATE: February 25, 1970

FROM : Morris Gildemeister, Chief
Statewide Planning Section

SUBJECT: T.H. 212, 95 - T.H. 694 to St. Croix River
and T.H. 95 By-pass
S.P. 8214-47, 8210
System Planning & Analysis Report S-1

The Statewide Planning Section transmits this report in response to R. T. Peterson's October 13, 1969 request for the 1985 ADT, DHV, and HCADT for the project location shown on the map on page 2.

The estimated 1985 one-way ADT volumes are shown on the maps on pages 3, 4, 5 and 6 for Alternates 1, 2, 3 and 4 respectively.

For each segment numbered on the map on pages 3, 4, 5 and 6 the following data are tabulated on pages 7-12, 13-14, 15-16 and 17 respectively.

- (a) Total One-way ADT
- (b) Vehicle Type Distribution
- (c) Total HCADT

Segment 6 on Proposed T.H. 212 with a 1985 one-way ADT of 16400, has the highest 1985 ADT on the project section of this highway. The parallel segment on existing T.H. 212 has a 1968 ADT of 2050 vehicles.

Segment 26 on the Proposed T.H. 95 by-pass has a one-way 1985 ADT of 8400. Segment 65 on existing T.H. 95 has a one-way 1985 ADT of 4000. The sum of these two for the T.H. 95 corridor is 12400, which is the highest 1985 ADT for this corridor. The corresponding segment on existing T.H. 95 has an estimated 1968 one-way ADT of 6660 vehicles.

The basic data, method, and assumptions used to prepare this report are presented on page 18.

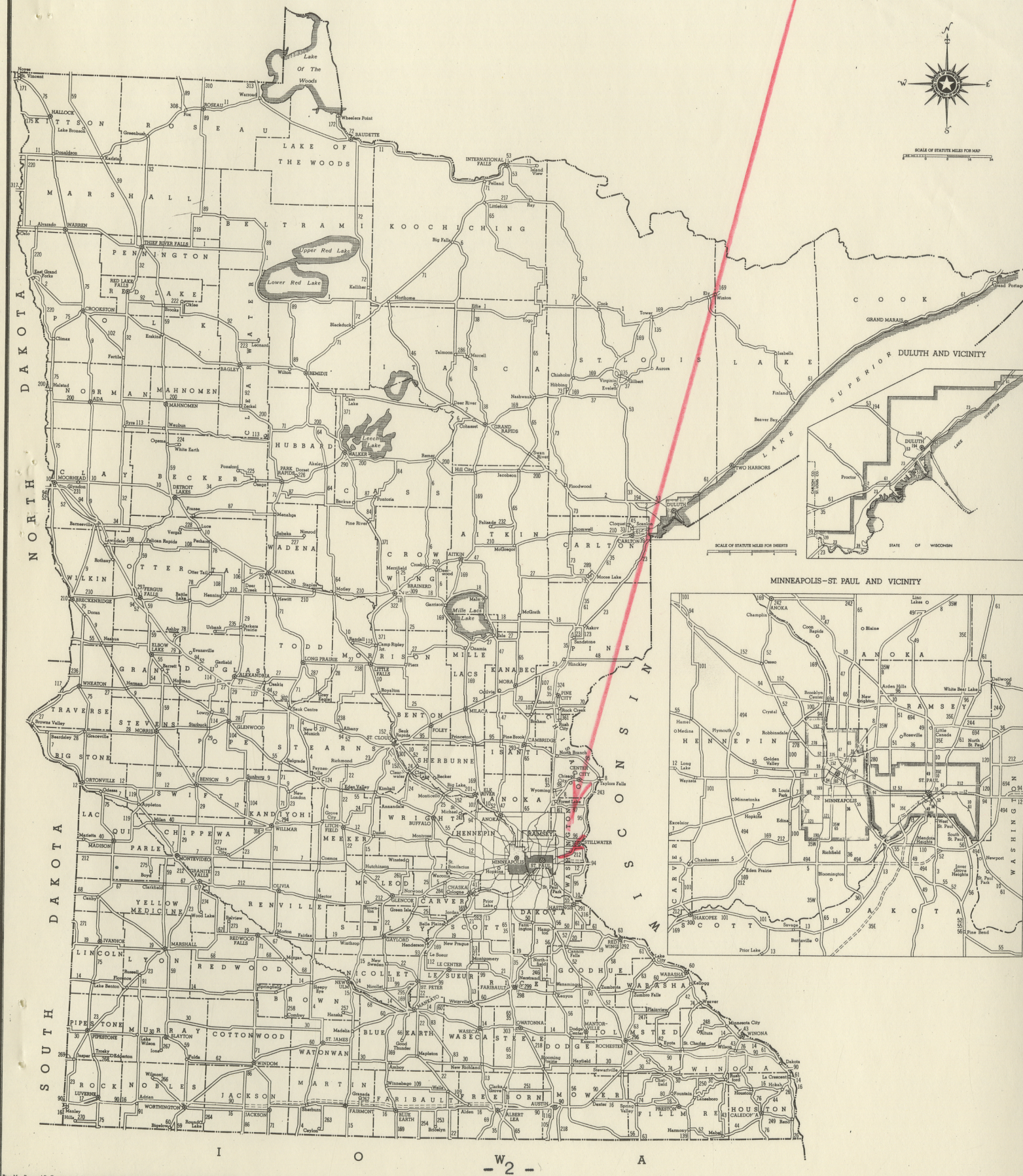
Morris Gildemeister

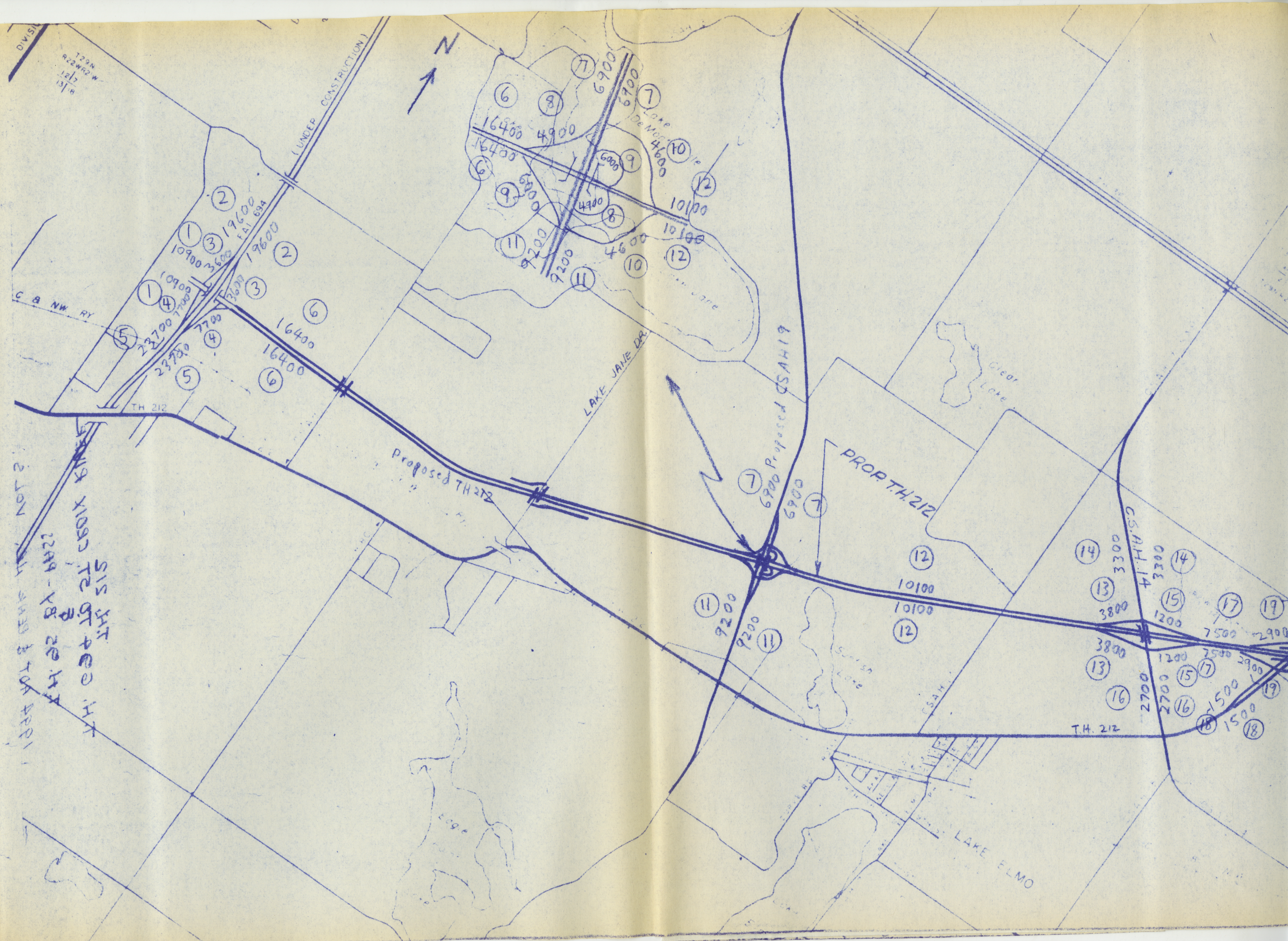
Morris Gildemeister, Chief
Statewide Planning Section

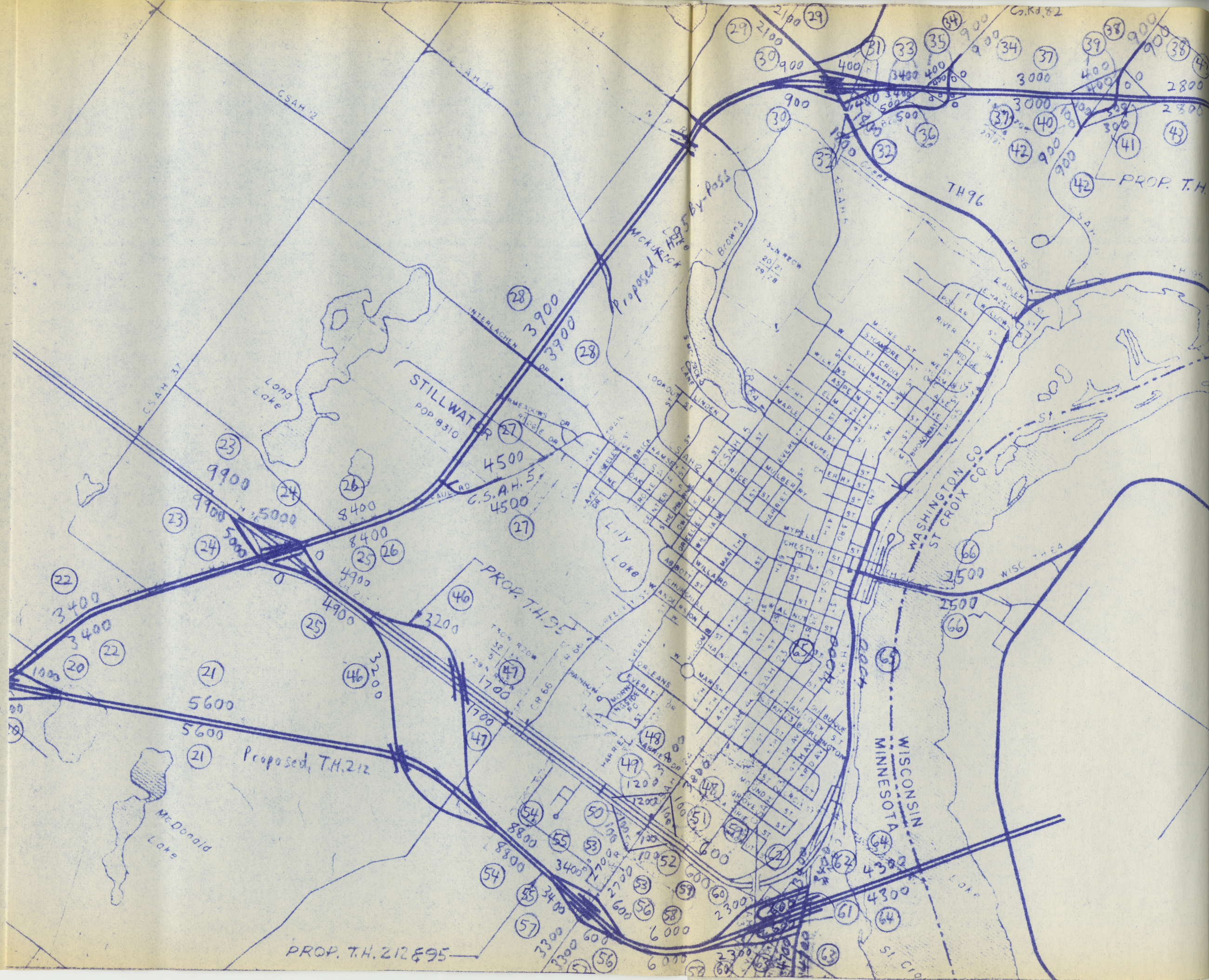
WF

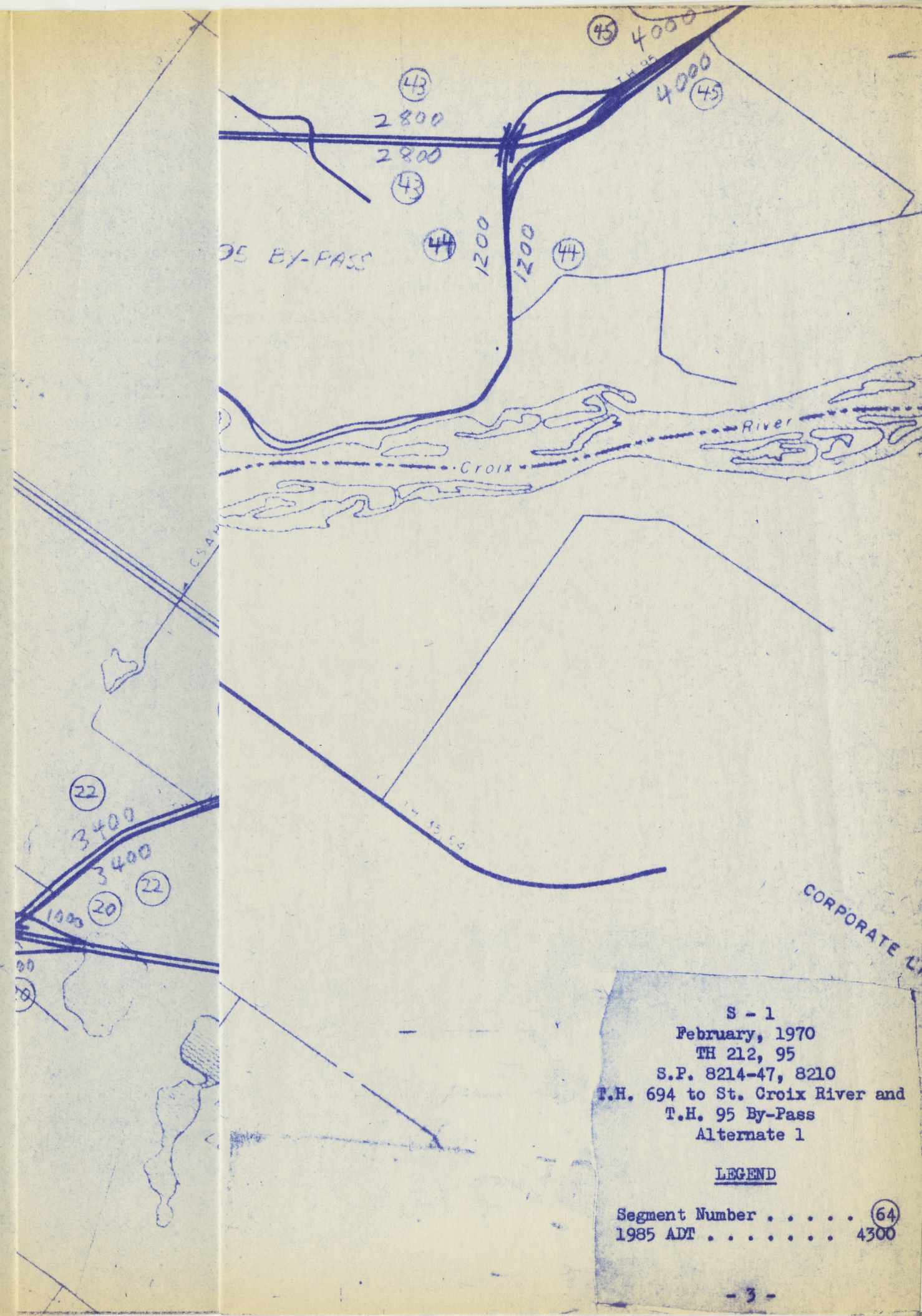
STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
WORK MAP

Project Location
S.P. 8214-47, 8210









DIVISION
T29N
R22W
S1/2
E1/2
S1/2
E1/2

(UNDER CONSTRUCTION)

N

C & NW RY

TH 212

LAKE JANE DR

PROP TH 212

CSA H 14
0033

7500

7500

1500

1500

LAKE ELMO

Lake Olson

Lake De Montreville

Lake Jane

Clear Lake

Sunfish Lake

Eagle Point

515 HT
2249-18 22 HT
2249-18 22 HT
2249-18 22 HT
2249-18 22 HT

19600
FAI 894
19600

10900
10900

23700
23700

16400
16400

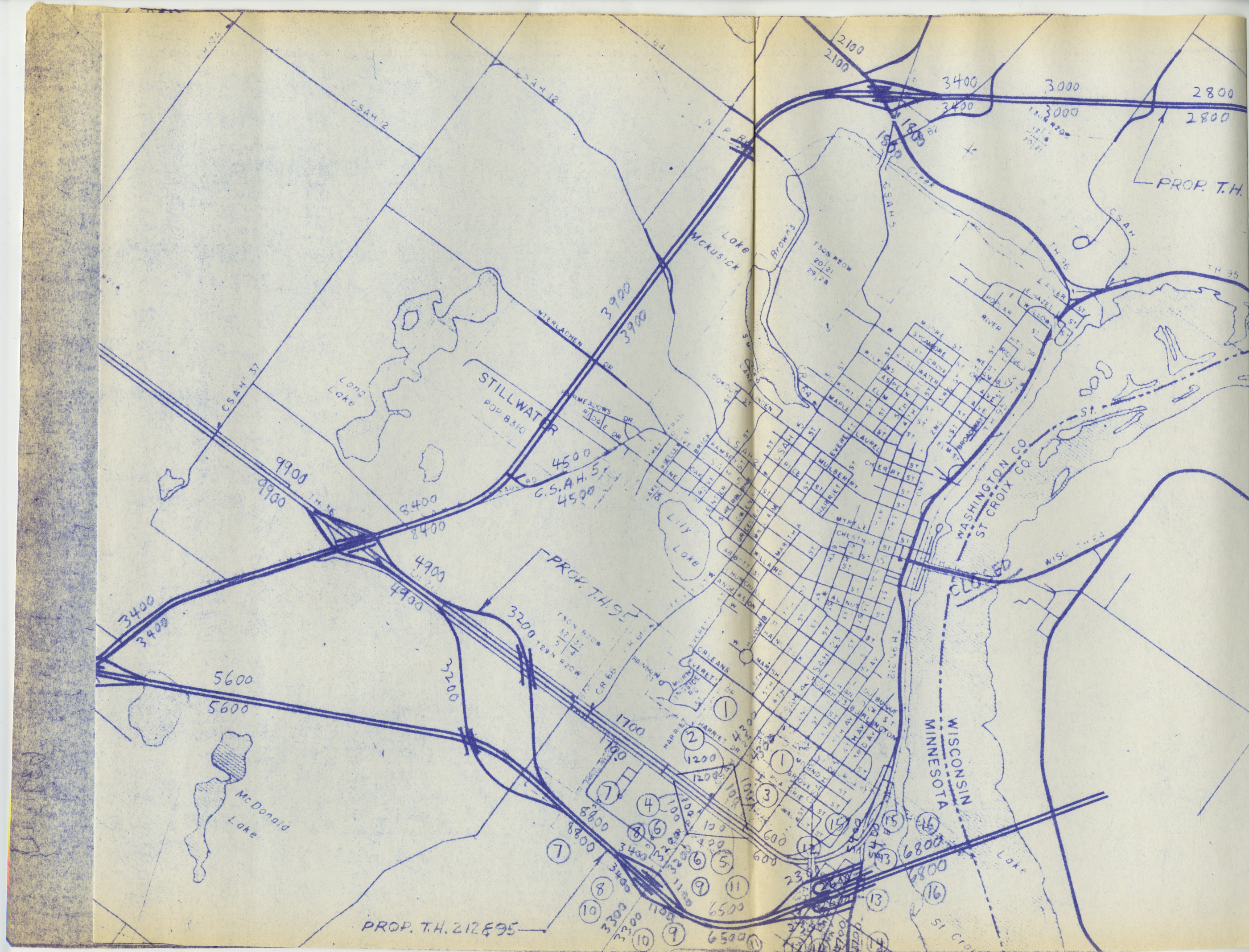
6900
6900

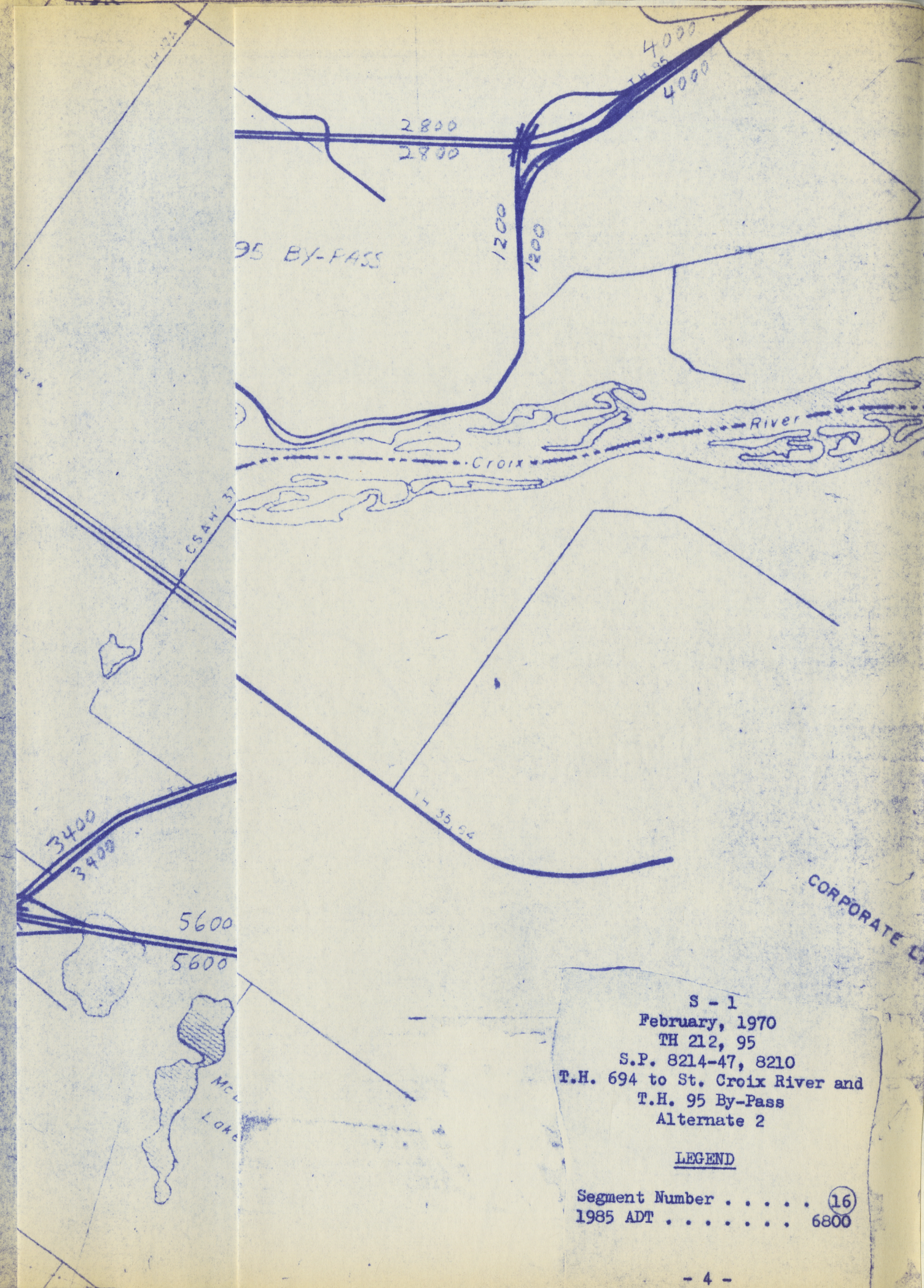
10100
10100

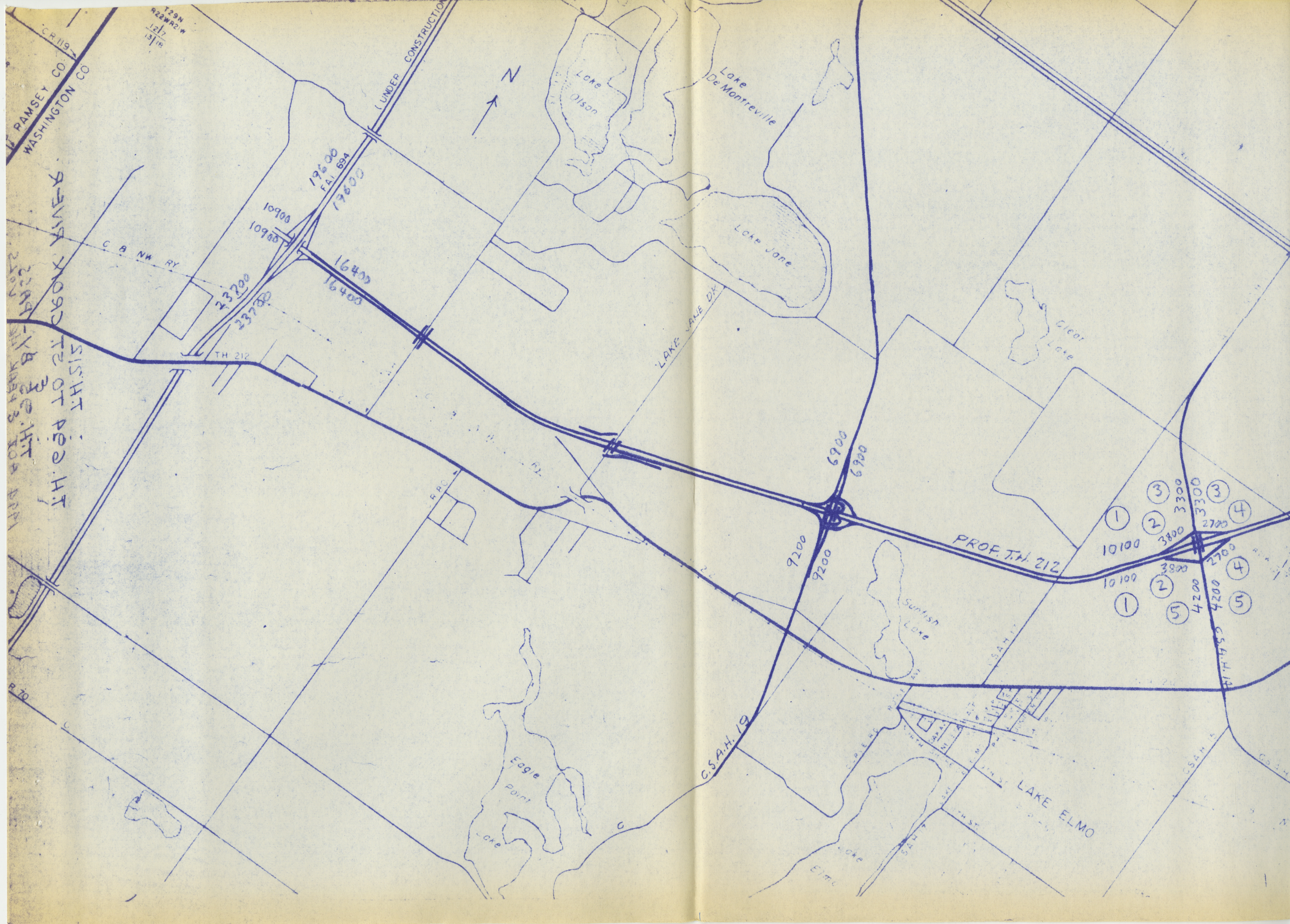
9200
9200

2700
2700

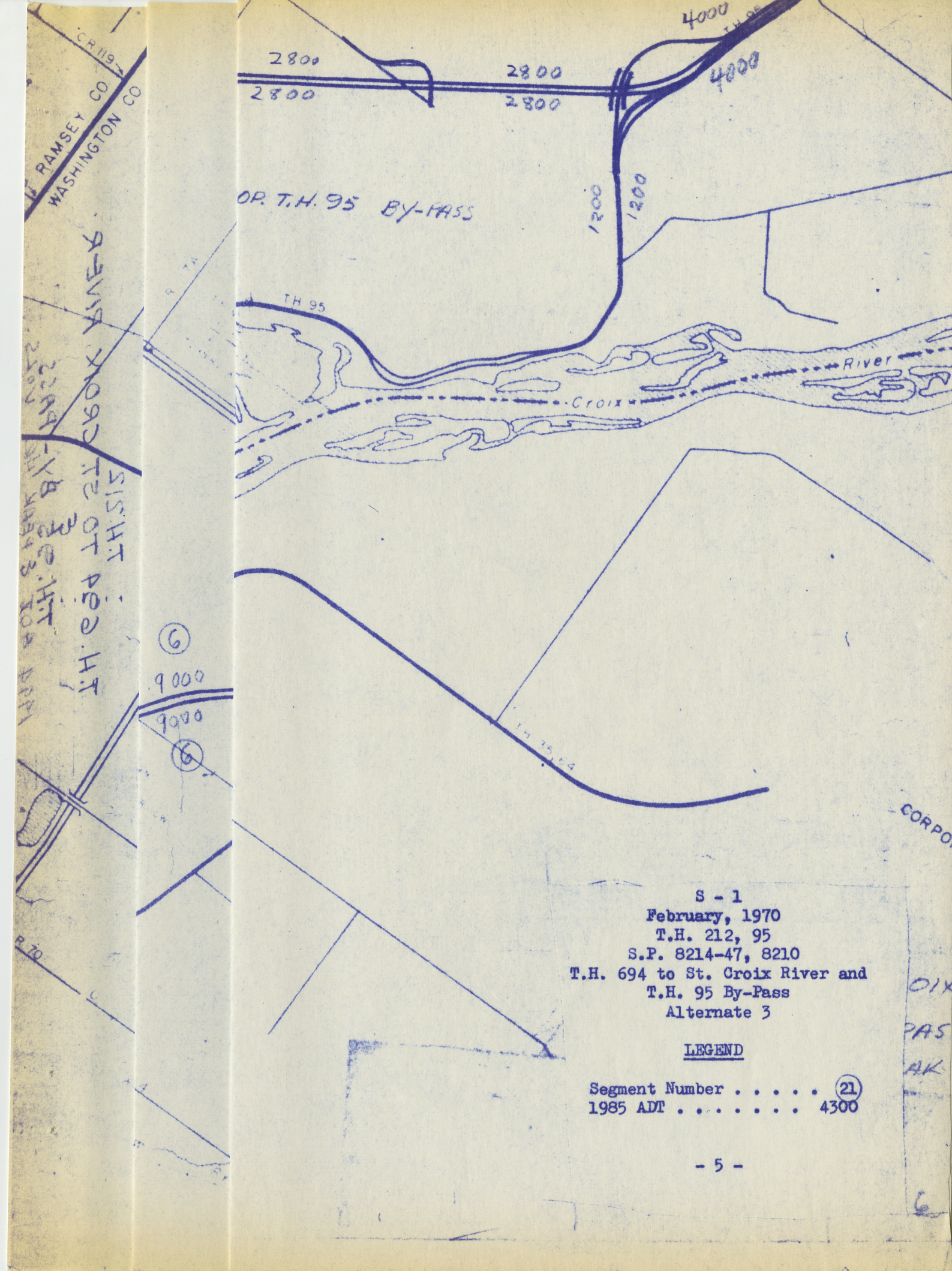
1500
1500

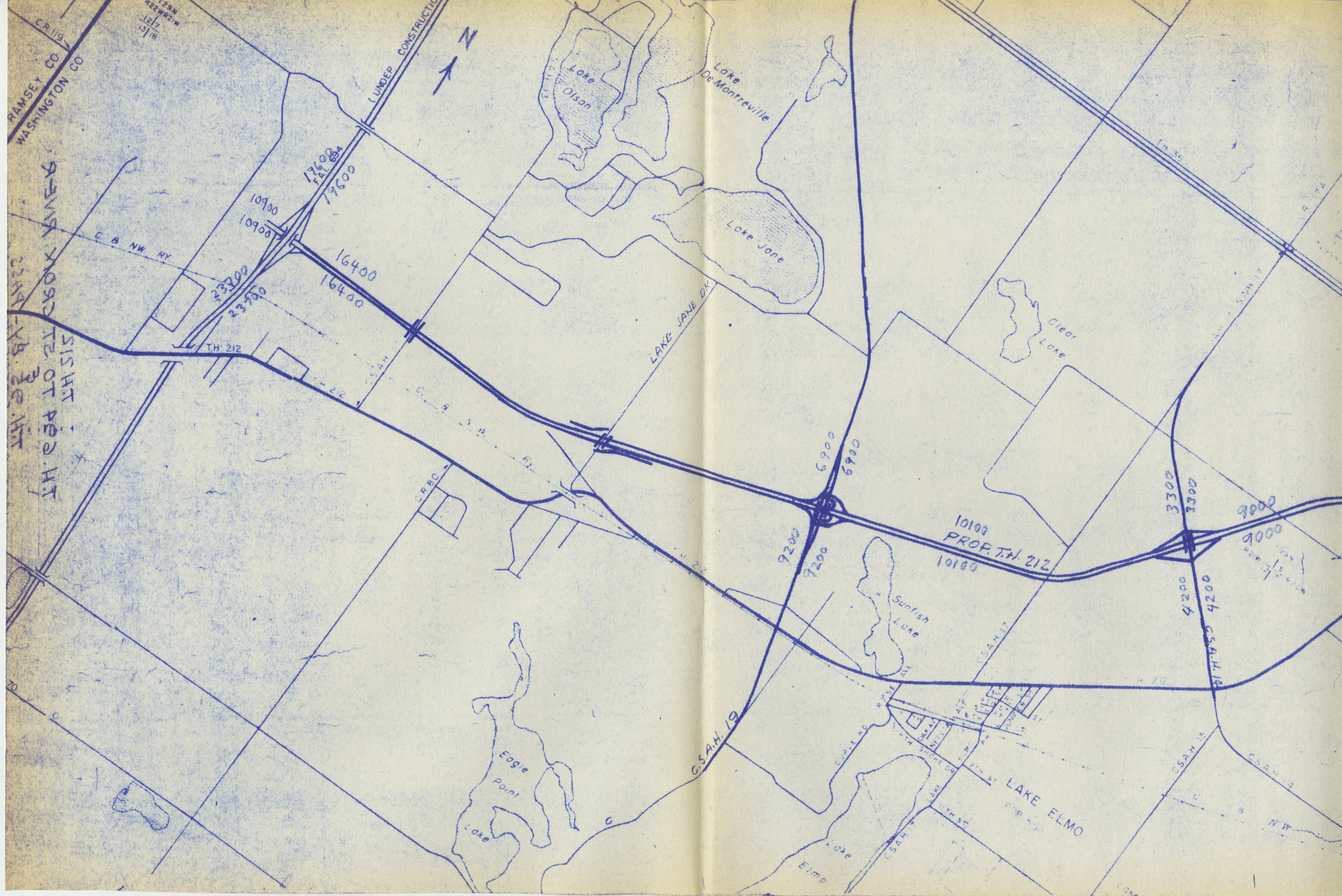




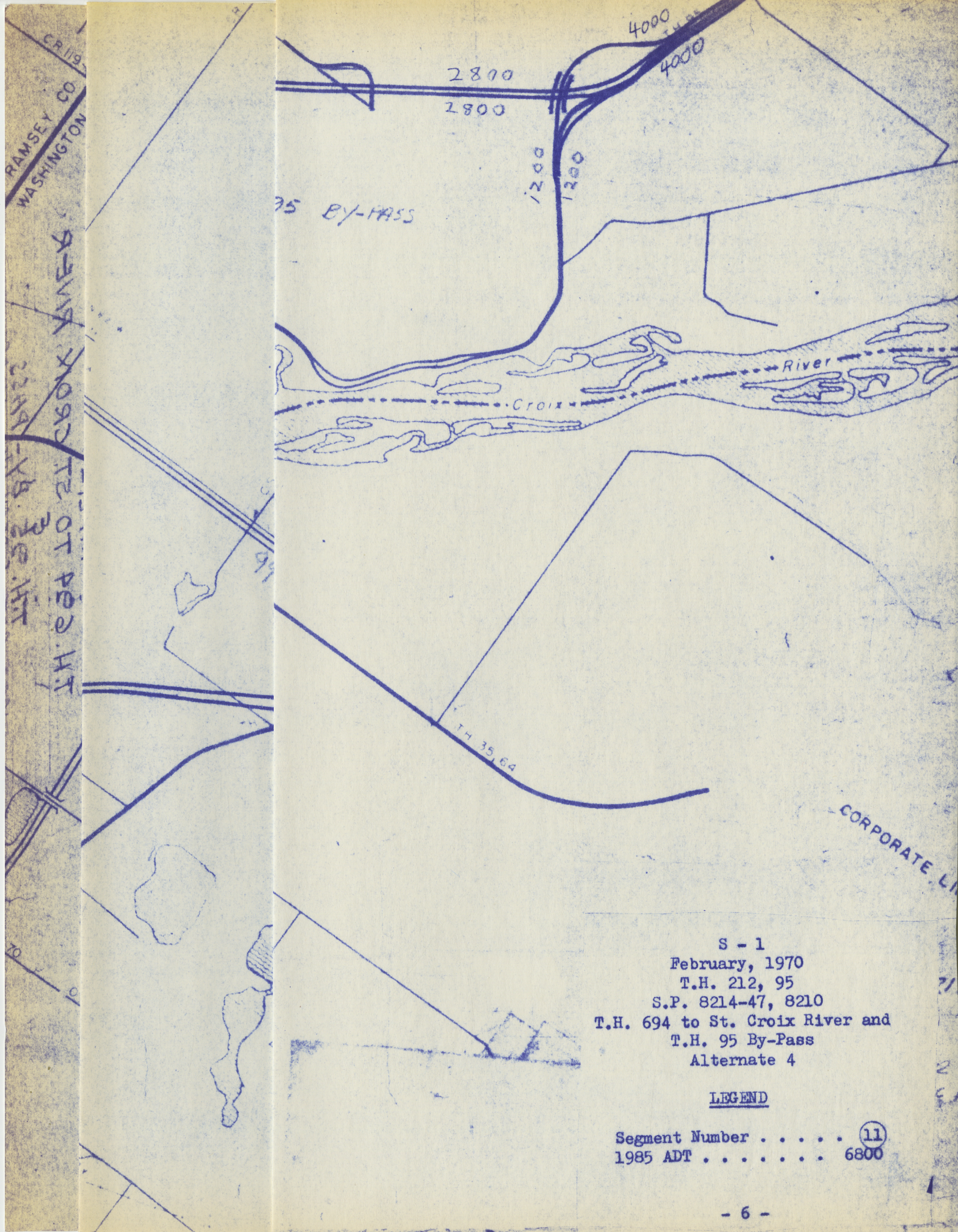












S - 1
February, 1970
T.H. 212, 95
S.P. 8214-47, 8210
T.H. 694 to St. Croix River and
T.H. 95 By-Pass
Alternate 4

LEGEND

Segment Number 11
1985 ADT 6800

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 1 OF 6

FOR

T.H. 212, 95 S.P. 8214-47, 8210 LENGTH - MILES
COUNTY Washington LOCATION T.H. 694 to St.
Croix River and T.H. 95 By-pass

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 1 THROUGH 11 AS
DEFINED ON ATTACHED INDEX MAP of Alternate 1 on page 3.

VEHICLE # TYPE	SEGMENT NUMBER										
	1	2	3	4	5	6	7	8	9	10	11
0	10280	18575	3424	7278	22429	15490	6526	4632	5665	4395	8697
1	300	349	87	230	492	454	207	144	165	117	252
2	66	253	26	73	300	114	33	24	31	17	45
3	50	48	3	8	53	55	18	14	19	9	29
4	25	109	25	27	111	50	22	17	27	12	38
5	50	164	4	8	168	56	18	15	28	10	42
6	129	102	31	76	147	181	76	54	65	40	97
TOTAL ADT	10900	19600	3600	7700	23700	16400	6900	4900	6000	4600	9200
TOTAL H. COMM. ADT	620	1025	176	422	1271	910	374	268	335	205	503
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

- 0 = PASSENGER CARS AND 4 TIRE TRUCKS
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
2 = SINGLE UNIT-3 AXLE TRUCKS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
- 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 2 OF 6

FOR

T.H. 212, 95 S.P. 8214-47, 8210 LENGTH - MILES
COUNTY Washington LOCATION T.H. 694 to St.
Croix River and T.H. 95 By-pass

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 12 THROUGH 22 AS
DEFINED ON ATTACHED INDEX MAP of Alternate 1 on page 3.

VEHICLE # TYPE	SEGMENT NUMBER										
	12	13	14	15	16	17	18	19	20	21	22
0	9588	3559	3092	1124	2529	7153	1395	2746	947	5354	3194
1	262	122	98	39	79	179	84	75	26	130	133
2	76	20	20	6	17	62	2	23	8	47	17
3	31	18	14	5	11	18	-	9	3	12	6
4	18	16	16	5	14	7	6	3	1	5	8
5	23	17	20	5	18	11	4	6	2	7	8
6	102	48	40	16	32	70	9	38	13	45	34
TOTAL ADT	10100	3800	3300	1200	2700	7500	1500	2900	1000	5600	3400
TOTAL H. COMM. ADT	512	241	208	76	171	347	105	154	53	246	206
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

- 0 = PASSENGER CARS AND 4 TIRE TRUCKS
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
2 = SINGLE UNIT-3 AXLE TRUCKS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
- 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 3 OF 6

FOR

T.H. 212, 95 S.P. 8214-47, 8210 LENGTH - MILES
 COUNTY Washington LOCATION T.H. 694 to
St. Croix River and T.H. 95 By-pass

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 23 THROUGH 33 AS

DEFINED ON ATTACHED INDEX MAP of Alternate 1 on page 3.

VEHICLE # TYPE	SEGMENT NUMBER											
	23	24	25	26	27	28	29	30	31	32	33	
0	9412	4875	4537	8069	4353	3716	2005	859	381	1719	3238	
1	215	60	155	193	78	115	44	21	10	37	104	
2	59	25	34	42	16	26	8	4	2	6	24	
3	12	6	6	12	7	5	3	1	-	3	4	
4	40	6	34	14	6	8	8	4	2	7	6	
5	130	12	118	20	8	12	13	4	2	11	10	
6	32	16	16	50	32	18	19	7	3	17	14	
TOTAL ADT	9900	5000	4900	8400	4500	3900	2100	900	400	1800	3400	
TOTAL H. COMM. ADT	488	125	363	331	147	184	95	41	19	81	162	
TOTAL DHV												
DIRECTIONAL DISTRIBUTION												

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
 2 = SINGLE UNIT-3 AXLE TRUCKS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 4 OF 6

FOR

T.H. 212, 95 S.P. 8214-47, 8210 LENGTH - MILES
 COUNTY Washington LOCATION T.H. 694 to
St. Croix River and T.H. 95 By-pass

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 34 THROUGH 44 AS

DEFINED ON ATTACHED INDEX MAP of Alternate 1 on page 3.

VEHICLE # TYPE	SEGMENT NUMBER											
	34	35	36	37	38	39	40	41	42	43	44	
0	871	387	484	2851	871	387	96	291	871	2659	1131	
1	16	7	9	97	16	7	2	5	16	93	33	
2	3	2	1	22	3	2	1	1	3	20	12	
3	1	-	1	4	1	-	-	-	1	4	4	
4	1	-	1	6	1	-	-	-	1	6	2	
5	2	1	1	9	2	1	-	1	2	9	2	
6	6	3	3	11	6	3	1	2	6	9	16	
TOTAL ADT	900	400	500	3000	900	400	100	300	900	2300	1200	
TOTAL H. COMM. ADT	29	13	16	149	29	13	4	9	29	141	69	
TOTAL DHV												
DIRECTIONAL DISTRIBUTION												

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
 2 = SINGLE UNIT-3 AXLE TRUCKS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 5 OF 6

FOR

T.H. 212, 95 S.P. 8214-47, 8210 LENGTH - MILESCOUNTY Washington LOCATION T.H. 694 toSt. Croix River and T.H. 95 By-pass

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 45 THROUGH 55 AS

DEFINED ON ATTACHED INDEX MAP of Alternate 1 on page 3.

VEHICLE * TYPE	SEGMENT NUMBER										
	45	46	47	48	49	50	51	52	53	54	55
0	3790	3006	1531	3523	1080	91	91	91	2534	8360	3208
1	126	108	47	106	33	3	3	3	76	238	81
2	32	11	23	29	16	1	1	1	14	58	23
3	8	1	5	18	4	-	-	-	14	13	8
4	8	20	14	23	10	1	1	1	14	25	14
5	11	43	75	66	53	4	4	4	17	50	42
6	25	11	5	35	4	-	-	-	31	56	24
TOTAL ADT	4000	3200	1700	3800	1200	100	100	100	2700	8800	3400
TOTAL H. COMM. ADT	210	194	169	277	120	9	9	9	166	440	192
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
 2 = SINGLE UNIT-3 AXLE TRUCKS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES

4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 6 OF 6

FOR

T.H. 212, 95 S.P. 8214-47, 8210 LENGTH - MILESCOUNTY Washington LOCATION T.H. 694 toSt. Croix River and T.H. 95 By-pass

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 56 THROUGH 66 AS

DEFINED ON ATTACHED INDEX MAP of Alternate 1 on page 3.

VEHICLE * TYPE	SEGMENT NUMBER										
	56	57	58	59	60	61	62	63	64	65	66
0	567	3101	5719	542	2190	573	3232	4470	4102	3774	2396
1	14	90	171	17	78	13	121	162	106	138	55
2	4	18	39	8	19	5	20	31	25	28	7
3	1	15	6	1	1	1	5	6	6	6	4
4	3	17	14	5	6	1	6	9	9	11	9
5	7	24	15	26	4	7	14	19	18	40	22
6	4	35	36	1	2	-	2	3	34	3	7
TOTAL ADT	600	3300	6000	600	2300	600	3400	4700	4300	4000	2500
TOTAL H. COMM. ADT	33	199	281	58	110	27	168	230	198	226	104
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
 2 = SINGLE UNIT-3 AXLE TRUCKS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES

4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 1 OF 2

FOR

T.H. 212, 95 S.P. 8214-47, 8210 LENGTH - MILESCOUNTY Washington LOCATION T.H. 694 toSt. Croix River and T.H. 95 By-pass

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 1 THROUGH 11 AS

DEFINED ON ATTACHED INDEX MAP of Alternate 2 on page 4.

VEHICLE # TYPE	SEGMENT NUMBER										
	1	2	3	4	5	6	7	8	9	10	11
0	4002	1080	91	91	91	3013	8360	3208	1046	3101	6198
1	117	33	3	3	3	87	238	81	25	90	182
2	30	16	1	1	1	15	58	23	5	18	40
3	19	4	-	-	-	15	13	8	2	15	7
4	25	10	1	1	1	16	25	14	5	17	16
5	71	53	4	4	4	22	50	42	12	24	20
6	36	4	-	-	-	32	56	24	5	35	37
TOTAL ADT	4300	1200	100	100	100	3200	8800	3400	1100	3300	6500
TOTAL H. COMM. ADT	298	120	9	9	9	187	440	192	54	199	302
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
 2 = SINGLE UNIT-3 AXLE TRUCKS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
 5 = TRACTOR-TRUCK OR SEM-TRAILER - 5 AXLES
 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 2 OF 2

FOR

T.H. 212, 95 S.P. 8214-47, 8210 LENGTH - MILESCOUNTY Washington LOCATION T.H. 694 toSt. Croix River and T.H. 95 By-pass

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 12 THROUGH 16 AS

DEFINED ON ATTACHED INDEX MAP of Alternate 2 on page 4.

VEHICLE # TYPE	SEGMENT NUMBER										
	12	13	14	15	16						
0	2190	2490	4470	5149	6498						
1	78	57	162	165	161						
2	19	11	31	26	32						
3	1	4	6	8	10						
4	6	8	9	13	18						
5	4	24	19	31	40						
6	2	6	3	8	41						
TOTAL ADT	2300	2600	4700	5400	6800						
TOTAL H. COMM. ADT	110	110	230	251	302						
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
 2 = SINGLE UNIT-3 AXLE TRUCKS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
 5 = TRACTOR-TRUCK OR SEM-TRAILER - 5 AXLES
 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 1 OF 2

FOR

T.H. 212, 95 S.P. 8214-47, 8210 LENGTH - MILES
 COUNTY Washington LOCATION T.H. 694 to
St. Croix River and T.H. 95 By-pass

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 1 THROUGH 11 AS

DEFINED ON ATTACHED INDEX MAP of Alternate 3 on page 5.

VEHICLE * TYPE	SEGMENT NUMBER										
	1	2	3	4	5	6	7	8	9	10	11
0	9588	3559	3092	2519	3924	8548	9412	4875	5354	9891	8069
1	262	122	98	123	163	263	215	60	130	285	193
2	76	20	20	8	19	64	59	25	47	81	42
3	31	18	14	5	11	18	12	6	12	18	12
4	18	16	16	11	20	13	40	6	5	39	14
5	23	17	20	9	22	15	130	12	7	125	20
6	102	48	40	25	41	79	32	16	45	61	50
TOTAL ADT	10100	3800	3300	2700	4200	9000	9900	5000	5600	10500	8400
TOTAL H. COMM. ADT	512	241	208	181	276	452	488	125	246	609	331
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
 2 = SINGLE UNIT-3 AXLE TRUCKS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 2 OF 2

FOR

T.H. 212, 95 S.P. 8214-47, 8210 LENGTH - MILES
 COUNTY Washington LOCATION T.H. 694 to St.
Croix River and T.H. 95 By-pass

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 12 THROUGH 21 AS

DEFINED ON ATTACHED INDEX MAP of Alternate 3 on page 5.

VEHICLE * TYPE	SEGMENT NUMBER										
	12	13	14	15	16	17	18	19	20	21	
0	4379	749	3705	3283	6261	2732	573	3809	4470	4102	
1	117	20	112	96	188	95	13	140	162	106	
2	40	6	31	20	47	27	5	25	31	25	
3	12	1	18	15	7	2	1	5	6	6	
4	25	5	25	19	19	11	1	7	9	9	
5	99	15	74	32	41	30	7	12	19	18	
6	28	4	35	35	37	3	-	2	3	34	
TOTAL ADT	4700	800	4000	3500	6600	2900	600	4000	4700	4300	
TOTAL H. COMM. ADT	321	51	295	217	339	168	27	191	230	198	
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
 2 = SINGLE UNIT-3 AXLE TRUCKS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 1 OF 1FORT.H. 212, 95 S.P. 8214-47, 8210 LENGTH - MILESCOUNTY Washington LOCATION T.H. 694 toSt. Croix River and T.H. 95 By-passBASED ON1985 ADT FROM TRAFFIC ANALYSIS UNITSHOWINGTOTAL ADT ON SEGMENTS 1 THROUGH 11 AS

DEFINED ON ATTACHED INDEX MAP of Alternate 4 on page 6.

VEHICLE # TYPE	SEGMENT NUMBER										
	1	2	3	4	5	6	7	8	9	10	11
0	9891	4379	1228	4184	3283	6740	5691	2732	2490	4470	6498
1	285	117	31	123	96	199	182	95	57	162	161
2	81	40	7	32	20	48	34	27	11	31	32
3	18	12	2	19	15	8	9	2	4	6	10
4	39	25	7	27	19	21	18	11	8	9	18
5	125	99	20	79	32	46	57	30	24	19	40
6	61	28	5	36	35	38	9	3	6	3	41
TOTAL ADT	10500	4700	1300	4500	3500	7100	6000	2900	2600	4700	6800
TOTAL H. COMM. ADT	609	321	72	316	217	360	309	168	110	230	302
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
 2 = SINGLE UNIT-3 AXLE TRUCKS 6 = BUSES AND TRUCKS WITH TRAILERS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES

BASIC DATA, METHODS, AND ASSUMPTIONS

The 1985 ADT and DHV were transmitted in TAS 639C-14 on December 9, 1969. Total heavy commercial ADT agree with the System "14" truck study.

Vehicle types for the project were adjusted for the geometrics of each of the four alternates of this report. These alternates are discussed in TAS 639C-14.

The 1994 volumes may be obtained by expanding the 1985 ADT by approximately 30 percent.